

(Model.)

W. ZAEHRINGER.

BILLIARD CUE.

No. 286,670.

Patented Oct. 16, 1883.

Fig. 1.

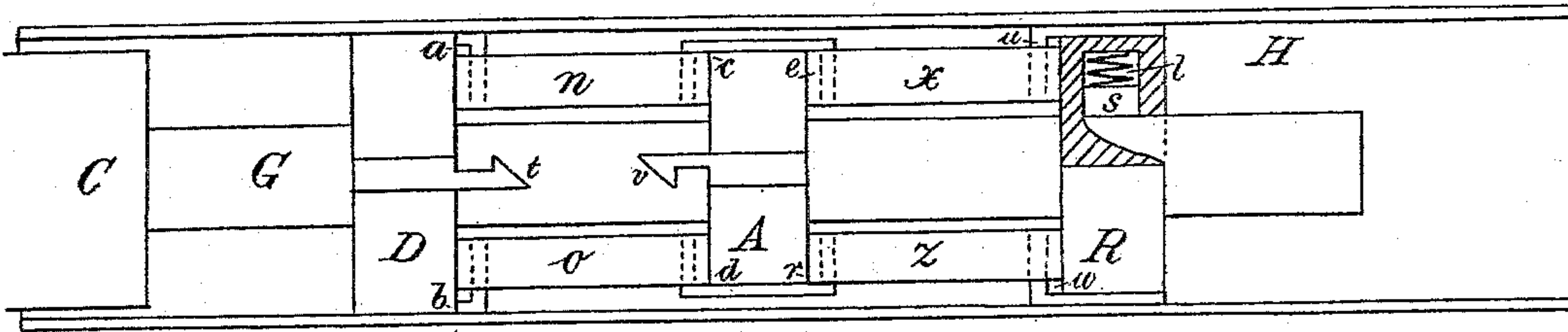


Fig. 2.

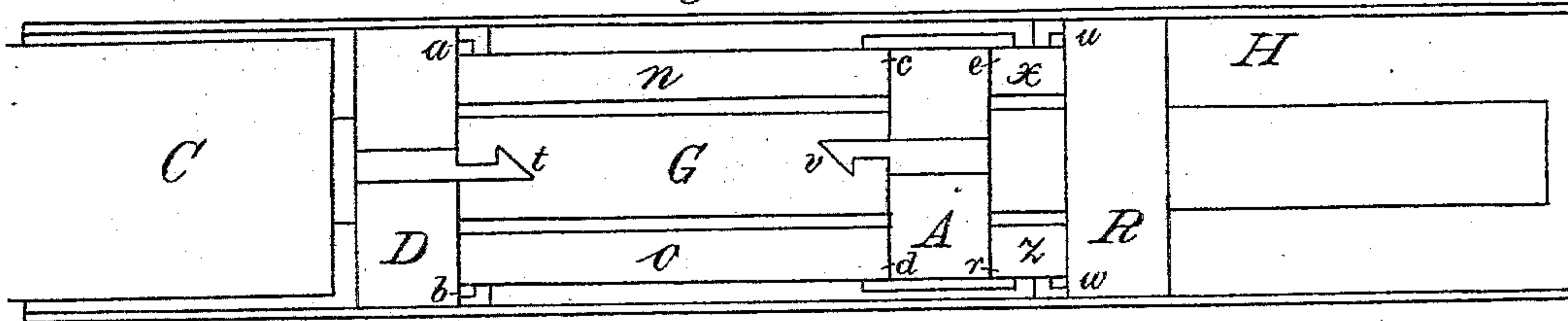


Fig. 3.

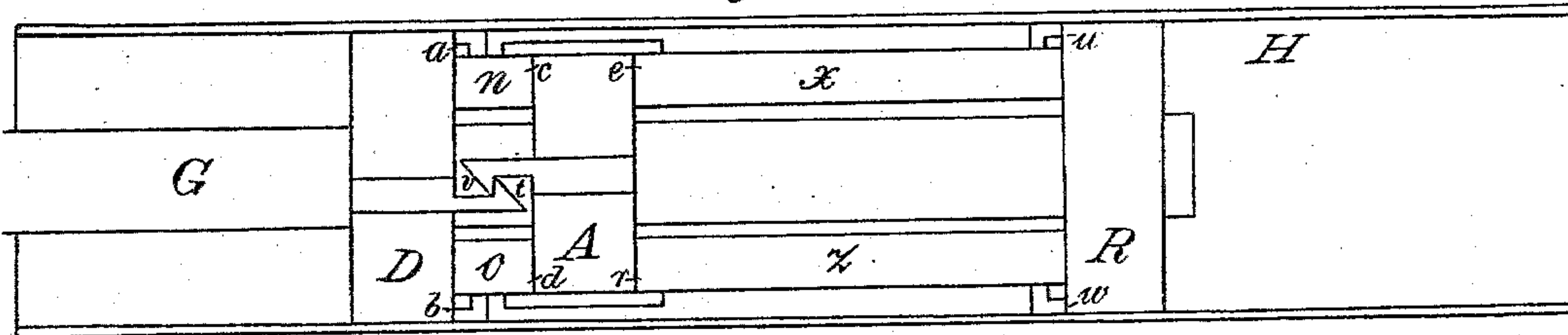


Fig. 4.

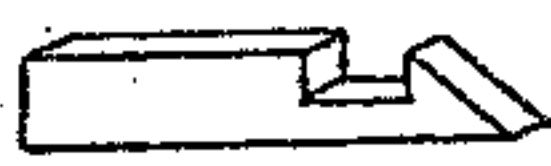


Fig. 5.

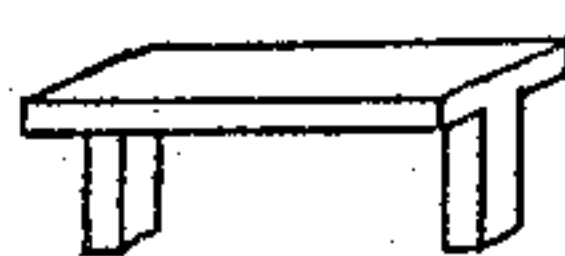


Fig. 6.

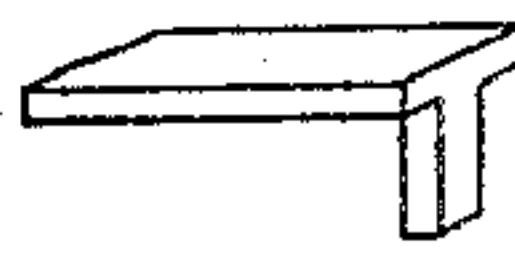
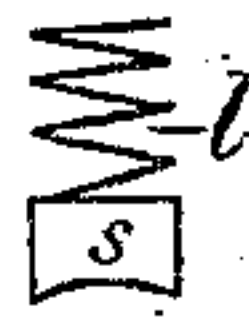


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM ZAEHRINGER, OF NEW ORLEANS, LOUISIANA.

BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 286,670, dated October 16, 1883.

Application filed January 2, 1883. (Model.)

To all whom it may concern:

Be it known that I, WM. ZAEHRINGER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Billiard-Cues; and I do hereby declare that the following is a full, clear, and correct description of the same, reference being had to the annexed drawings, forming part of this specification.

The object of my invention is, first, to provide a billiard-cue that will, owing to its peculiar construction, enable a novice to make with facility what is known in billiard parlance as the "draw shot," which is a most important and very difficult shot often presenting itself in the game; second, a billiard-cue to facilitate the execution of what is known as the "massé shot;" third, a billiard-cue the use of which will lessen the danger of tearing the cloth when attempting the shots referred to; fourth, a billiard-cue adapted to the execution of all other shots presenting themselves in a game, with as much or more facility than is possible with the ordinary cue.

To accomplish these ends, I have invented a simple and reliable billiard-cue, specially calculated to deliver a free and elastic stroke to the cue-ball, thereby communicating to it the necessary retrograde movement. Before going into details of its construction, it is necessary for a proper comprehension of the principle to point out why a large proportion of players fail in the endeavor to make a draw shot. Having studied this problem, I am prepared to say that the fault is committed by the player in holding or grasping the cue too tight, instead of holding it loosely, as does the successful expert. It is a noted fact that a large proportion of billiard-players, with years of experience, have not yet mastered the draw shot, owing solely to the error pointed out above; therefore, I have invented a billiard-cue which a player may hold loose or tight, as he pleases, without spoiling the elasticity of the stroke, hence communicating to the cue-ball the necessary retrograde movement.

Figure 1 is an interior view of the oscillating handle, showing the butt-end of a billiard-cue, shaped to form a shank with a collar, upon which shank are two sliding collars, each

provided internally with a spring and button, said collars being secured to the interior of the oscillating handle, and having hooks to which are secured elastic bands; also a special hook on the forward collar of the handle, and a similar one on the collar of the shank. Fig. 2 shows the recoil of the shank and cue in the handle, through the collars of the same; also the elongation and contraction of the elastic bands; Fig. 3, the position of the handle, collars, shank, elastic bands and hooks, when the elastic movement of the handle is suspended; Fig. 4, the form of hook on the forward collar of handle, and on the collar of the shank; Fig. 5, the form of hooks on the collar of shank; Fig. 6, the form of hooks on collars of the handle, and Fig. 7 the form of spiral spring and button.

In Fig. 1, C is a partial view of an ordinary billiard-cue, with a shank, G, at the butt-end.

H is a cylinder of suitable thickness, forming an oscillating handle, made of gutta-percha or other material.

D and R are two collars, which fit loosely to play upon the shank G, and are secured to the cylinder H by means of screws, or otherwise.

A is a collar, forming part of shank G.

n is an elastic band, one end of which being fastened to the hook *a* on collar D, the other end being fastened to hook *c* on collar A. *o* is a similar band, fastened to hook *b* on collar D, and hook *d* on collar A. *x* is a similar band, fastened to hook *u* on collar R, and hook *e* on collar A. *z* is a similar band, fastened to hook *w* on collar R, and hook *r* on collar A. These four elastic bands are all at a tension sufficient to keep the handle H in the position indicated until a stroke is made.

We will now suppose that a player desires to execute a draw-shot. Everything being ready, he grasps the handle H, and resting the cue in proper position upon the bridge-hand, he moves it back and forth preparatory to delivering the stroke, when, the instant the stroke is given to the cue-ball, (below its center,) the handle H, held firmly by the hand, will compel the cue to recoil through it, as shown in Fig. 2, elongating-bands *n* and *o*, and contracting bands *x* and *z*, thus giving a free and elastic stroke to the cue-ball, and communicating to it the proper retrograde movement necessary for a draw-shot. Immediately after

the stroke is given, the now elongated bands *n* and *o* will again contract, replacing the handle H, as indicated in Fig. 1.

In using this cue, it may be desired by the player, when about to execute a "follow" or a "spread shot," to convert it into an ordinary or solid cue, as it were. This is instantly accomplished, as shown in Fig. 3, by pulling the cue outward from the handle H, thus forcing the hook *t* on collar D, to lock with hook *v* on collar A. The handle, so fastened, will remain stationary in playing, and consequently the cue is transformed into an ordinary one, but can be instantly reset for draw shots, at the option of the player.

Anticipating some objection to the lateral play of the shank G, in collars D and R of the handle H, I provide each of said collars with a button, *s*, and a spring, *l*, (shown by a sectional view of the collar R, in Fig. 1.) This button (or several) being forced against the shank G by the spring *l* will effectually remedy this evil.

It may be preferable, for durability, to use ordinary metallic closed spiral springs instead of the elastic bands shown in the drawings; and it should be borne in mind that my drawings do not indicate the exact positions of the handle, shank, and elastic bands, as these must necessarily be made to suit the varying requirements of the players.

The surface of the shank G may be lined with metal to protect it from the friction of the collars D and R, and said shank may, if necessary, be loaded with additional weight.

From the foregoing description, it must be obvious that the natural wrist-movement possessed by the expert billiard-player is embodied in the cue which I have fully described, so that a novice in the art is enabled by its use to execute with facility that difficult and important stroke known as the "draw shot;" and he is also prepared to master a massé shot without incurring as much danger of tearing the cloth as attends the use of the ordinary billiard-cue.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a billiard-cue, C, a fixed shank, G, with a collar, A, sliding collars D and R, secured to and forming part of handle H, said collars being provided with hooks *c*, *e*, *d*, *r*, *a*, *b*, and *u w*, for securing the ends of elastic bands *n*, *o*, *x*, and *z*, substantially as and for the purpose set forth.

2. The combination of the hook *t* on collar D of handle H, with hook *v* on collar A of shank G, as and for the purpose set forth.

3. In combination with the sliding collar R (and D) of handle H, spring *l*, and button *s*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name.

WM. ZAEHRINGER.

Witnesses:

C. SCHÜLLER,
WM. A. VALLOTT.